GL BAJAJ
Institute of Management & Research. PGDM Institute
FIND YOUR SPARK
GREATER NOIDA (Approved by A.I.C.T.E., Ministry of HRD, Govt. of India)

Roll No…………

Plot No. 2, Knowledge Park-III, Greater Noida (U.P.) –201306

PGDM/PGDM (General) -2021-23
END TERM EXAMINATION (TERM -IV)
Academic Session : 2022-23

Subject Name: **Financial Derivatives and Risk Management** Time: **02.30 hrs**
Sub. Code: **PGF-41** Max Marks: **40**

Note:
All questions are compulsory. Section A carries 5 marks: 5 questions of 1 marks each, Section B carries 21 marks having 3 questions (with internal choice question in each) of 7 marks each and Section C carries 14 marks one Case Study having 2 questions of 7 marks each.

SECTION - A

Attempt all questions. All questions are compulsory. **1×5 = 5 Marks**
Q. 1: (A). Differentiate between Long Put and Short Put.
Q. 1: (B). Forwards are OTC, do you agree?
Q. 1: (C). What are two components of Options premium? In an ATM options contract what is the breakup of each component?
Q. 1: (D). Differentiate between Spot and Strike Price.
Q. 1: (E). Differentiate between Deep ATM and Deep OTM.
CO1, L1

SECTION – B

All questions are compulsory (Each question have an internal choice. Attempt any one (either A or B) from the internal choice) **7 x 3 = 21 Marks**

Q. 2: (A). Discuss the Utility of Black-Scholas Options Valuation Technique using an illustration. CO2, L2

Or

Q. 2: (B). A trader has Long Call and Long Put as per data given below:

Long	Call	Put
Strike	8300	8100
Premium	145	140
Spot	8000	

If Current Market Price changes from 8200 to 9200, with an interval of 100 points what will be the payoff of each contract at different spot values. CO2, L2

Q. 3: (A). Differentiate between bullish view and Bearish view with an example. Also provide the view of trader i.e whether it is bullish or bearish in following cases: CO3,L3

a. Selling a call option
b. Buying a call option

c. Selling a put option

Or

Q. 3: (B). i) What is Hedge Strategy in Futures? What are it's different types?
ii) A sugarcane trader is expecting a stock of 200 MT from various farmers to be available to him after three months, next April. In the normal course, the prices of sugarcane in the month of April remain at Rs. 80 per quintal (Rs. 800/MT). As a bumper sugarcane crop is anticipated, he is worried about a fall in prices. However, futures in sugar are available, and 3-m contracts of 10 MT each are selling for Rs. 800 per quintal (Rs. 8000/MT). How can the trader hedge his position using futures contracts in sugar, assuming the prices of sugar and sugarcane are perfectly and positively correlated? CO3,L3

Q. 4: (A). A swap is a derivative contract through which two parties exchange the cash flows or liabilities from two different financial instruments. Explain using an example. CO3, L3

Or

Q. 4: B. Draw a gross payoff diagram for a short position in a call at strike 100. Also draw the gross payoff diagram for a long position in a put option at the same strike and maturity as the call. (CO3 L3)

SECTION - C

Read the case and answer the questions **7×02 = 14 Marks**
Q. 5: Case Study: CO4. L5,L6

Suppose a trader is bullish about the market. Since the scenario was his company ABC ltd has sold the put option of Reliance ltd of strike price 4200 at the premium of Rs 170 having lot size of 250 shares when the spot price was 4250.

Few Days later the market conditions were weakened by the announcement of RBI and Fed rate hike announcements. Due to which, Reliance Ltd. price was reduced to Rs 4200.To cover themselves from unlimited loss the ABC ltd also purchased the put option of strike price of Rs 4100 at the premium of Rs 105.On the date of expiry the market price of Reliance was Rs 4180.

You are required to answer

Q. 5: (A).
i) What is the profit/loss to ABC Ltd in the above case study?
ii) Which option of ABC ltd is in the money and which option is out of the money?

Q. 5: (B).
i) What is the maximum profit A would be able to earn using above strategy?
ii) What is maximum loss A would have to face using above strategy?

Mapping of Questions with Course Learning Outcome

Question Number	COs	Bloom's taxonomy level	Marks Allocated
Q. 1:	**CO1**	**L1**	**5 marks**
Q. 2:	**CO2**	**L2**	**7 marks**
Q. 3:	**CO3**	**L3**	**7 marks**
Q. 4:	**CO3**	**L3**	**7 marks**
Q. 5:	**CO4**	**L5,L6**	**14 marks**

Note: Font: Times New Roman, Font size: 12.